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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,073	08/22/2000	Bernd-Georg Pietras	MRKS/0012	5424

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William B Patterson
Thomason Moser & Patterson
Suite 1500
3040 Post Oak Boulevard
Houston, TX 77056

EXAMINER	
GAY, JENNIFER HAWKINS	
ART UNIT	PAPER NUMBER
3672	32

DATE MAILED: 05/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/509,073	APPLETON ET AL.
	Examiner	Art Unit
	Jennifer H Gay	3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 April 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15,16,26-28 and 30-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15,16,26-28 and 30-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 31 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 15, 16, 26-28, 30-32, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delano (US 4,100,968) in view of WO 98/11322 (previously cited).

Regarding claims 15 and 16: Delano teaches a technique for running casing. The apparatus used in that technique includes the following features:

- A body (44, 46, and 48) connected to a top drive (42).
- A set of gripping elements (126 and 128) that is radially displaceable to drivingly engage a tubular so the tubular (34) is threaded into another tubular (30) until adequately tightened. (See col. 2, lines 5-15)
- A sealing packer (186) that prevents fluid from escaping from the tubular. As seen in Figure 5, fluid traveling up the tubular would press the sides of the packer firmly against the inside wall of the tubular.

Delano discloses all of the limitations of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto.

As seen in Figure 6, WO 98/11322 teaches a gripping element (11 and 15) that is radially displaced by the direct application of hydraulic fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have applied hydraulic, or pneumatic, fluid directly to the gripping element, as taught by WO 98/11322, of Delano in order to have had direct control over the amount of internal frictional connection between the element and the tubular (see page 5, paragraph 4, lines 8-10).

Regarding claims 26-28: The apparatus of Delano includes the following features:

- A body (44, 46, and 48) connected to a top drive (42).
- A set of gripping elements (126 and 128) that is radially displaceable to drivingly engage a tubular so the tubular (34) is threaded into another tubular (30) until adequately tightened. (See col. 2, lines 5-15) The gripping elements are displaceable by pneumatic fluid (see col. 4, lines 20-25) and are located in a recess in the outer surface of body portion 44 (see Figure 3).

Delano discloses all of the limitations of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto.

As seen in Figure 6, WO 98/11322 teaches a gripping element (11 and 15) that is radially displaced by the direct application of hydraulic fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have applied hydraulic, or pneumatic, fluid directly to the gripping element, as taught by WO 98/11322, of Delano in order to have had direct control over the amount of internal frictional connection between the element and the tubular (see page 5, paragraph 4, lines 8-10).

Regarding claim 31: The apparatus of Delano includes the following features:

- A top drive (42).
- A body having multiple sections (44, 46, and 48).
- A recess disposed about the outer surface of second section 46.
- A pair radially expandable gripping elements (168 and 170) are located in the recess (see Figure 4).

Though the gripping elements (168 and 170) shown in Figure 4 of Delano are not radially expandable with pressurized hydraulic or pneumatic fluid, the gripping elements (126 and 128) shown in Figure 3 are (see col. 4, lines 20-25). It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have been obvious to have used hydraulically or pneumatically actuated grippers as taught in column 4, lines 20-25 and Figure 3 for the gripping elements in Figure 4 in order to have used a gripping element that was more accurately controlled.

Delano discloses all of the limitations of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto; the gripping elements 126 and 128 are not displaced by direct hydraulic or pneumatic pressure.

As seen in Figure 6, WO 98/11322 teaches a gripping element (11 and 15) that is radially displaced by the direct application of hydraulic fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have applied hydraulic, or pneumatic, fluid directly to the gripping element, as taught by WO 98/11322, of Delano in order to have had direct control over the amount of internal frictional connection between the element and the tubular (see page 5, paragraph 4, lines 8-10).

Regarding claim 30: The first section, 44, includes a splined recess (see Figure 3) in which splined connecting members (126 and 128) are located.

Regarding claim 32: The gripping elements are radially expanded to engage the inner walls of a tubular (34) (see col. 6, lines 5-20).

Regarding claim 34: The body is connected to the top drive (see Figure 1).

Regarding claim 35: The top drive rotates the body to provided rotational torque to all a screw connection between multiple tubulars (30 and 34). (See col. 2, lines 5-15)

Regarding claim 36: The apparatus of Delano discloses the following features:

- A body (44, 46, and 48) connected to a top drive (42).
- At least one gripping element (126 and 128) that is radially displaceable by pneumatic fluid. The gripping element is used to drivingly engage a tubular so the tubular (34) is threaded into another tubular (30) until adequately tightened. (See col. 2, lines 5-15)
- A sealing packer (186) that prevents fluid from escaping from the tubular. As seen in Figure 5, fluid traveling up the tubular would press the sides of the packer firmly against the inside wall of the tubular.

Delano discloses all of the limitations of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto.

As seen in Figure 6, WO 98/11322 teaches a gripping element (11 and 15) that is radially displaced by the direct application of hydraulic fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have applied hydraulic, or pneumatic, fluid directly to the gripping element, as taught by WO 98/11322, of Delano in order to have had direct control over the amount of internal frictional connection between the element and the tubular (see page 5, paragraph 4, lines 8-10).

Regarding claim 38: The apparatus of Delano discloses the following features:

- A body (44, 46, and 48) connected to a top drive (42).
- At least one gripping element (126 and 128) that is radially displaceable by pneumatic fluid. The gripping element is used to drivingly engage a tubular so the tubular (34) is threaded into another tubular (30) until adequately tightened. (See col. 2, lines 5-15)
- A sealing packer (186) that prevents fluid from escaping from the tubular. As seen in Figure 5, fluid traveling up the tubular would press the sides of the packer firmly against the inside wall of the tubular.

Delano discloses all of the limitations of the above claims except for the gripping element being radially displaced by hydraulic or pneumatic fluid directly applied thereto.

As seen in Figure 6, WO 98/11322 teaches a gripping element (11 and 15) that is radially displaced by the direct application of hydraulic fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have applied hydraulic, or pneumatic, fluid directly to the gripping element, as taught by WO 98/11322, of Delano in order to have had direct control over the amount of internal frictional connection between the element and the tubular (see page 5, paragraph 4, lines 8-10).

3. Claims 33, 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delano (US 4,100,968) in view of WO 98/11322 (previously cited) as applied to claims 31 and 32 above, and further in view of Boyadejeff and Albright et al.

Delano and WO 98/11322 disclose all of the limitations of the above claims except for the casing support being carried by pneumatically operated weight-compensating pistons.

Boyadejeff teaches a tubing support system that includes compensating pistons.

Albright et al. teaches a weight compensation system that includes pistons that are controlled either hydraulically or pneumatically.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used the tubing support system of Boyadejeff in conjunction with the weight compensating pistons of Albright et al. with the pipe connecting device of Delano in view of WO 98/11322 in order to have been able to use the device with pipes of various lengths, thus weights, without overloading the system (see col. 1, lines 60-65 of Albright et al.).

Response to Arguments

4. Applicant's arguments filed 15 April 2003 have been fully considered but they are not persuasive.

Applicant argues that there is no motivation to combine Delano in view of WO 98/11322 in the references themselves; specifically applicant argues that page 5, paragraph 4, lines 8-10 of WO 98/11322, the motivation provided by the examiner, does not teach using hydraulic fluid to control the amount of an internal friction connection between the gripping element and the tubular. The examiner disagrees with this argument. While WO 98/11322 does not specifically state that the hydraulic fluid controls the amount of internal friction, it is the opinion of the examiner that this inherently taught. It is considered well known in the art that when applying hydraulic pressure to an element to expand it that the degree of expansion is directly dependent on the amount of hydraulic pressure applied. Therefore, the more hydraulic pressure applied to the gripping element of WO 98/11322 the greater the expansion and the greater the expansion the greater the frictional relationship between the element and the tubular.

In response to applicant's argument that there is no reasonable expectation that the slip segment of Delano could be replaced by the hydraulically activated catcher of WO 98/11322 without adversely affecting its intended operability, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary

reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The examiner notes that she is not suggesting replacing one system for the other but merely has used WO 98/11322 for the teaching of directly applying hydraulic pressure to an expandable gripping element.

Conclusion

5. The examiner notes that in the Interview of 02 May 2002 she inadvertently indicated that claims 1-14 were cancelled by the After Final amendment filed 14 October 2001. The After Final amendment of 14 October 2001 was never entered per the Advisory Action mailed 05 February 2002 therefore the claims were not cancelled. Claims 1-14 should be indicated as cancelled in the response to this Office Action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H Gay whose telephone number is (703) 308-2881. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (703) 308-2151. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

David Bagnell
Supervisory Patent Examiner
Art Unit 3672

JHG
May 20, 2003